



NASA Procedural Requirements

COMPLIANCE IS MANDATORY

NPR 7500.1

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2001

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[Printable Format \(PDF\)](#)

Subject: NASA Technology Commercialization Process w/ Change 1 (4/9/04)

Responsible Office: Exploration Systems Mission Directorate

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CHAPTER 7. Managing Technology Commercialization Performance

7.1 Technology Commercialization is Performance Based

7.1.1 Consistent with NASA's Strategic Management Handbook ([NPR 1000.2](#)), technology commercialization has become a performance-based activity. Currently, most NASA activities specifically report and manage technical, cost, and schedule performance. Technology commercialization performance will now be included as a reportable item within each applicable NASA activity.

7.1.2 As directed in [NPD 7500.2](#), this NPR establishes a standard "core set" of metrics and trend indicators to be used across all NASA activities. Metrics differ from "trend indicators" in that metrics can be quantified, assigned specific goals, measured, and a variance computed and analyzed. Trend indicators are performance items which get base lined and trended over time. These indicators do not have specific goals and thus no variances. Rather, the trend is analyzed to determine if it is moving in the right direction and at an acceptable rate.

7.2 What is the Core Set of Performance Data?

7.2.1 Figure 7-1 shows the technology commercialization hierarchical categories from which the core set of performance data is derived. Figure 7-1 is basically a hierarchical representation of the overall technology commercialization process described in Chapter 3. Table 7-1 shows the specific metrics and trend indicators within each category. Appendix C provides a detailed definition of all the items in Table 7-1.

7.2.2 As Table 7-1 shows, there are only two metrics in the core set with the other items being trend indicators. NASA submits both of these metrics as part of its annual Accountability Report in response to GPRA. The "technologies released to the public" metric is collected and reported in support of NASA's Communicate Knowledge (CK) process - one of the cross-cutting processes in NASA's Strategic Plan. The "partnership investment" metric is collected and reported in support of NASA's Provide Aerospace Products and Capabilities (PAPAC) process - the other major NASA cross-cutting process. Again, additional detail on these two metrics is given in Appendix C.

7.2.3 Each NASA activity will be able to access its core set of metrics and trend indicators (as well as other status information) in NASATechTracS via a Web portal called KIMS (Knowledge Integration & Management System). The metric and indicator data in KIMS will be updated monthly. The Center's Commercial Technology Office (CTO) can assist program/project managers with gaining access to, and utilizing, KIMS.

7.3 Determining and Reporting the Performance Status

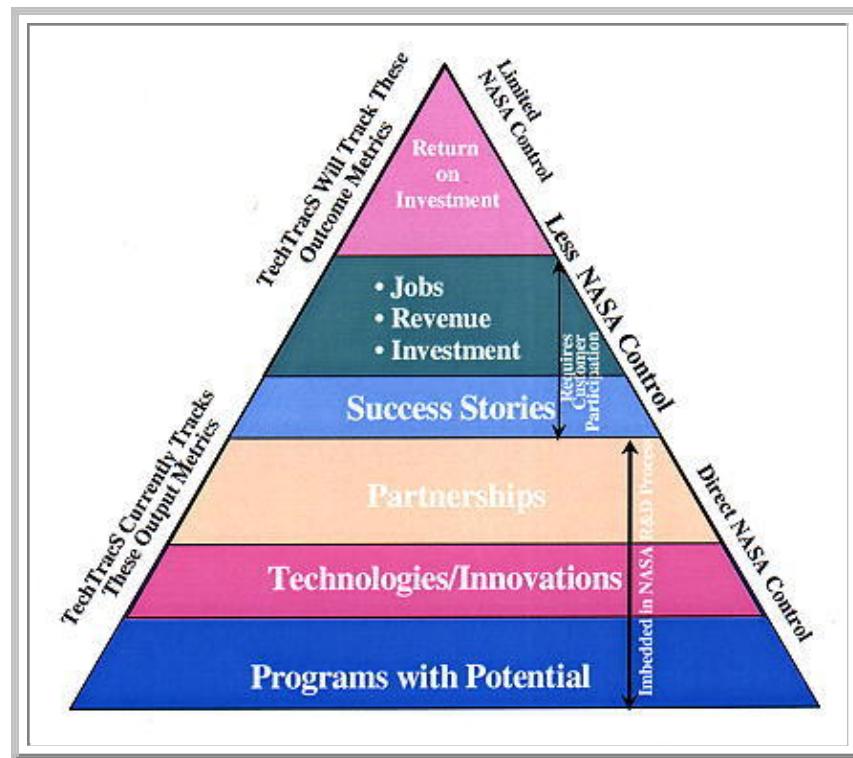
7.3.1 Working closely with their respective CTO, each NASA activity should review the core set of metric and trend indicator data and determine the status of its technology commercialization efforts. As discussed earlier, the NASA activity manager may include other data in the assessment, if applicable. However, such data should be viewed as supplemental to, and not in lieu of, the core set.

7.3.2 All NASA activities should incorporate technology commercialization performance into their normal performance reporting process. For those programs under [NPG 7120.5](#), this will be accomplished via the Quarterly

Program Status Report (QPSR) provided to the Governing Program Management Council (GPMC).

7.3.3 Under the QPSR approach, technology commercialization performance is to be assigned a green, yellow, or red status. A green status implies that technology commercialization performance is satisfactory. A yellow status indicates that there are some issues, but corrective actions are underway and on-schedule. A red status indicates that there are significant issues and that corrective actions are behind schedule. Appendix C provides an example of a QPSR with technology commercialization performance included. More information on the GPMC can be found at <http://www.hq.nasa.gov/office/codea/codeae/pmc.html>.

Figure 7-1 Hierarchy of Technology Commercialization Performance Categories



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Table 7-1 Listing of Metrics and Trend Indicators by Category

Category	Item	Metric or Trend Indicator
Commercial Assessments	Activities with Commercial Potential	Trend Indicator
	Activities with New Technologies	Trend Indicator
	Activities without New Technologies	Trend Indicator
New Technologies	Year-to-Date Technology Portfolio	Trend Indicator
	Total Current Technology Portfolio	Trend Indicator
	Technologies Released to Public	Metric
	Portfolio Available to Public	Trend Indicator
Partnerships	Active Partnership Portfolio	Trend Indicator
	Partnership Investment	Metric
Success Stories	Year-To Date Portfolio	Trend Indicator
	Total Current Portfolio	Trend Indicator
Economic Impacts	Under Study	Under Study

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7.3.4 Per [NPD 7500.2](#), the Associate Administrator for the Aerospace Enterprise will provide a quarterly Agencywide

summary of the core set of performance data to the Associate Deputy Administrator and to the Senior Management Council. This report will summarize the data by both Enterprise and Center.

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